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"*To the solid ground*
Of Nature trusts the mind which builds for aye."—WORDSWORTH

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A REMARKABLE METEOR.

ON March 17 last, about 4.15 p.m., the track of a brilliant meteor in the southern heavens, at an altitude of 30°, was observed by Mr. R. Brough Smyth, of Sandhurst, Victoria, Australia. Writing to us on March 19, Mr. Smyth says :—

"The line was silver-white and of considerable breadth. The sun was shining in a clear sky. Owing to the view being intercepted by large gum-trees growing in the grounds around my house, I could see only a portion of the arc described. Subsequently, a little after 5 o'clock p.m., the sky was obscured by a kind of mist or vapour at a great height—in colour between steel-grey and lead-grey, and with tints similar to those of the metal bismuth over the whole. All objects looked green or greenish in the strange light. The meteor was observed at Salisbury in South Australia, at Coleraine in the extreme west of Victoria, and at various places eastward—say over a distance of 400 miles. It travelled apparently from east to west, and as far as known was visible in the southern part of Australia only. In some places it presented the appearance of a blood-red ball, and at Beaufort the ball is said to have exploded with a loud report, sending up a streak of fire, accompanied with the hissing of escaping steam, as from an engine. It left a cloud of greyish smoke. This smoke-like cloud was observed in other places. At Warrnambool on the west coast, and at Terang, twenty-five miles north-eastward, shocks of what were supposed to be earthquakes were felt at the time of the disappearance of the meteor. Cattle and horses galloped about in alarm, houses were shaken, windows rattled, and the wild fowl in the lakes were disturbed, and took wing. I inclose cuttings from the *Argus* containing accounts of this phenomenon."

The "cuttings" inclosed by Mr. Smyth are a series of telegrams, describing the phenomenon as seen in various parts of Australia. At Coleraine, "a brilliant ball of fire shot from the zenith in a clear sky to 30° above the horizon, and then disappeared as it exploded, leaving a large cloud of white smoke, which was visible for half an hour. Exactly six minutes subsequently, two distinct shocks like cannon reports were heard, with a perceptible tremor of the atmosphere. The phenomenon was witnessed by 500 persons." At Merino, "a most unusual phenomenon appeared in the eastern sky. A streak like smoke from a volcano appeared. Immediately after the appearance, a report like distant thunder was heard from the same direction. It was thought that an aërolite of immense size had fallen between Merino and Hamilton." At Stawell the "meteor appeared to burst just beyond the town in a cloud of smoke, which was immediately followed by a loud crash like thunder." From Terang it is reported that at Lake Keilambete "the black swans were noticed to rise suddenly off the lake. A rumbling noise appeared to pass under, causing the cattle grazing on the banks of the lake to scamper away, and on gaining some distance they were seen to look back. The noise was heard in other places, and seemed to pass to the south-west." At Portland, "three distinct reverberations like the booming of artillery were heard about 4 p.m." The people at Warrnambool, hearing, shortly after 4 o'clock, loud detonations like a volley of musketry, with subsequent dropping shots, rushed out of their houses; and "the cattle were paralyzed with fear at the sounds." The disappearance of the meteor over Beaufort, where it is said to have exploded, "was followed by earth tremors and a rumbling sound as of the firing of heavy artillery. The vibrations lasted for ten seconds. Several houses were shaken severely. No substance appears to have fallen to the earth."

SCIENTIFIC SERIALS.

THE contents of vol. lv. part 2, No. 4, of the *Journal of the Asiatic Society of Bengal*, are varied. They commence by a memoir on the land shells of Perak, by Dr. O. F. v. Möllendorff, in which 58 species (many new) are enumerated or described. Then follows an account of solar thermometric observations at Allahabad, by S. A. Hill, Meteorological Reporter to the Government of the North-West Provinces. The third memoir is an historico-geographical study on probable changes in the Punjab and its rivers, by R. D. Oldham, of the Indian Geological Survey, a paper on which much research has been expended, tending to prove that a second large river, independent of the Indus, once existed in the Punjab, and that the geological changes which converted a once fertile district into a desert probably date so recently as the early centuries of the Christian era. The next is a very important entomological investigation of the butterflies of Cachar, by Prof. Wood-Mason and Mr. L. De Nicéville, enumerating no less than 247 species obtained between the end of March and the beginning of October. A remarkable feature is the large number of *Hesperiidæ*, of which 53 distinct species were obtained. There are valuable notes on seasonal and local variation, and a considerable number of new species are described, and mostly figured on four plates, one of which is a chromo-lithograph executed in London, the others "autotype," and apparently very successful examples of what may be produced by the process as applied to natural history subjects. Dr. King follows with a short paper on some new species of *Ficus* from New Guinea, in which the author largely quotes from and anticipates a monograph on Indo-Malayan and Chinese figs prepared for the Linnean Society; the remarks are worthy of very careful study, and open up much new light on the somewhat obscure subject known as "caprification." The concluding paper is a very short one by Mr. J. S. Baly on a new species of *Hispa* destructive to the "dahn" crops in Chittagong. On the whole this part is one of the most valuable that have been issued by this long-established Society.

Proceedings of the Linnean Society of New South Wales, 2nd series, vol. i., part 4, February 22, 1887 (Sydney), contains :—*Zoology*; George Masters, catalogue of the described Coleoptera of Australia, part 6.—E. Meyrick, descriptions of new Lepidoptera. A large number of new species and several new genera are described; a new species of Thalpochares is given the name of Coccophaga, from the singular habits of the larva, which feeds solely on a Coccus infesting a Macrozamia.—E. P. Ramsay, notes on the eggs of various Australian birds; list of Western Australian birds collected at Derby; on the nest of *Pycnoptilus floccosus* (plate xx.); on a new species of Hapalotis (*H. boweri*) (plate xviii.).—E. P. Ramsay and J. Douglas-Ogilby, on a new species of Apogon (*A. roseigaster*).—William Macleay, on a new species of Hoplocephalus (*H. collaris*).—C. W. De Vis, on new or rare vertebrates from the Herbert River; describes a new Pseudochirus (*P. mongan*), a new Dromicia (*D. frontalis*), and records the occurrence of some rare species.—A. J. North, notes on the bower birds, and some references to authentic descriptions of Australian birds' eggs.—*Botany*: E. Haviland, flowering seasons of Australian plants.—J. Stirling, on the Rutaceæ of the Australian Alps.—Baron von Mueller, on some hitherto undescribed plants of New South Wales. *Grevillea renwickiana* is described as quite procumbent, with elongated branches, being in this respect like *G. laurifolia* and *G. repens*, but differing from both in the larger and much less numerous flowers; also new species of Melaleuca, Bossiæa, and Pultenæa.—*Palæontological*: F. Ratte, notes on Australian fossils.—W. J. Stephens, on some new Labyrinthodonts (plates xiv. and xxii.).—J. Mitchell, on the geology of Bowning, N.S.W.

Zeitschrift für wissenschaftliche Zoologie, vol. lv. Part 2, April 13, 1887, contains :—Dr. O. Schultze, researches on the ripening and the fertilization of the amphibian ova, part 1 (plates xi. to xiii.).—Dr. Wilhelm Roux, on a fungus living parasitically in bones (*Mycelites ossifragus*) (plate xiv.). The author gives an account of the filaments of this fungus occurring in the bones of a large number of extinct forms of mammals, reptiles, and fishes.—Dr. Otto Zacharias, contributions to the pelagic and littoral fauna of the German Ocean. In this paper are described a large number of Entomostraca, Rotatoria, Hydrachnida, and Turbellaria, some new. In an appendix, S. A. Poppe describes a new species of Temorella from Holstein and Mecklenburg (plate xv.).—Dr. H. Strahl, on the walls of the yolk-sac and on the parablast in lizards (plate xvi.).—Dr. Joseph Heinrich List, on the glandular structures in the foot of *Tethys fimbriata*, L. (plate xvii.). These glands are found both on the upper and under side of the feet, and are of four different sorts; while some are slime organs, others may be phosphorescent organs.—Dr. Eugen Korschelt, on some interesting phenomena in the formation of the eggs of insects (plates xviii., xix.).

SOCIETIES AND ACADEMIES.

LONDON.

Royal Society, April 28.—"On the Homologies and Succession of the Teeth in the Dasyuridæ, with an Attempt to